

# **GAS CONVERSION INSTRUCTIONS** HI/LOW REMOTE VALVE

#### FOR CONVERSION TO PROPANE GAS

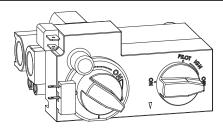
MODELS USED ON	CONVERSION KIT PART NUMBER	
BFR212RN	CKV119	
BFR30RN	CKV120	

#### **AWARNING**

This conversion kit is to be installed by an Empire Comfort Systems distributor (or other qualified agency1)\* in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The qualified agency performing this work assumes responsibility for this conversion.

<sup>1</sup>National Fuel Gas Code Z223.1 (Latest Edition) Natural Gas and Propane Installation Code, CSA B149.1.

\*The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (A) the installation of gas piping or (B) the connection, installation repair, or servicing of equipment, who is experienced in such work, familiar with all precautions required, and has complied with all the requirements of the authority having jurisdiction.



### **AWARNING**

Perform the safety shutdown test any time work is done on a gas system to avoid the possibility of fire or explosion with property damage, personal injury or loss of life.

#### **TOOLS REQUIRED:**

- 3/4 inch open-end wrench •
- 9/16 inch open-end wrench
- 5/16 inch open-end wrench, and socket or nut driver
- 3/8 inch open-end wrench or socket
- 1/4 inch nut driver
- Flat-head screwdriver
- 4mm allen key

PARTS LIST			
Part Description	Kit Number CKV119	Kit Number CKV120	Quantity Supplied
Pilot Orifice	R12069 (#8)	R12069 (#8)	1
2.2mm Min. Rate Screw	R1264	R1264	1
Conversion Label	R1322	R1322	1
Conversion Label	R1321	R1321	1
Burner Orifice	P252 (#44)	P286 (#42)	1

39694-1-1019 Page 1 The vented burner when converted to Propane Gas will have manifold pressure of 10.0" w.c. at the valve outlet with the inlet pressure to the valve from a minimum of 11.0" w.c. for the purpose of input adjustment to a maximum of 13.0" w.c.

#### INSTRUCTIONS FOR CONVERSIONS

- 1. Remove logs, rockwool, and lava rock from burner.
- If burner is installed, turn-off gas supply before making conversion. Depress gas supply dial on valve to the "OFF" position. Disconnect gas inlet line from valve. Move burner to stable work surface.
- Using a flat-head screwdriver, remove the Pressure Regulator from the front of the Gas Valve. See Figure 1.

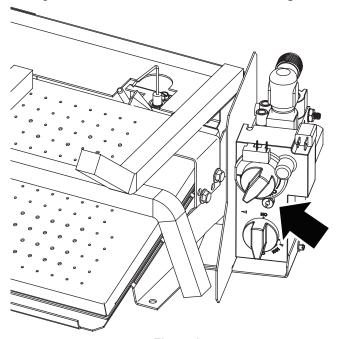


Figure 1

4. Reset the Pressure Regulator to the Propane position as shown in **Figure 2** and reinstall into Gas Valve.

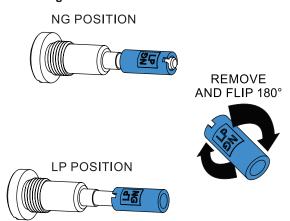


Figure 2

5. Using a 1/4" nut driver, remove the Ignitor Bracket to gain access to the Pilot Tube. **See Figure 3.** 

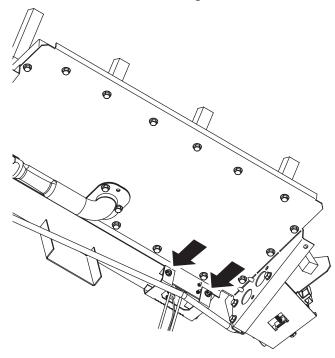


Figure 3

- 6. Using a 5/16" open-end wrench, disconnect pilot tubing at the pilot burner.
- 7. Remove Pilot Orifice from pilot and replace with Propane Pilot Orifice marked 8 supplied in conversion kit. **See Figure 4.**

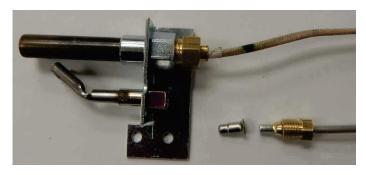


Figure 4

- B. Reattach pilot tubing and Ignitor Bracket to burner.
- 9. Using 9/16" open-end wrench, remove the main Burner Orifice and replace with Propane main Burner Orifice supplied in conversion kit. Set Air Shutter to FULL OPEN and reinstall Brass Elbow. **See Figure 5.**

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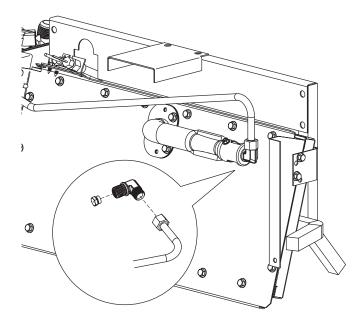
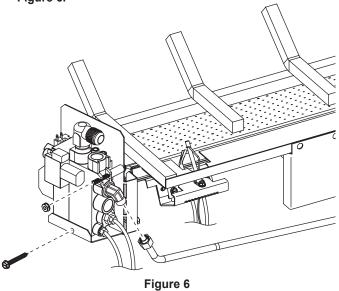


Figure 5

 Using 5/16" nut driver, remove the hardware retaining the Gas Valve to the Valve Bracket. Using a 9/16" open-end wrench, break the Gas Supply Tube free from the Brass Elbow. See Figure 6.



11. Replace the Minimum Rate Screw using a 4mm allen key with new 2.2mm Min. Rate Screw in kit. **See Figure 7.** 

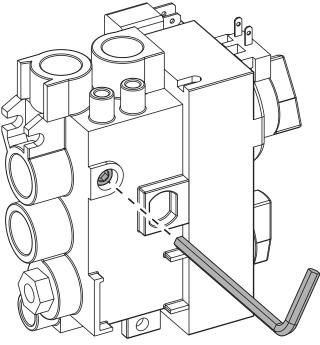


Figure 7

- Replace Gas Valve to Valve Bracket and Gas Supply Tube to Brass Elbow.
- 13. The converted burner must be connected to a supply of the conversion gas and checked for leaks.
- 14. The burner must be checked to ensure it is operating at the correct pressure of 10.0" w.c.
- Reinstall the rockwool and lava rock onto the burner. See burner owner's manual for more information.
- 16. Install the logs onto the burner. See burner owner's manual for more information.
- 17. Conversion is completed.

#### **PLACEMENT OF CONVERSION LABELS**

- Conversion label R-1322 is to be placed in a location visible when all parts are installed.
- Gas conversion label R-1321 is to be placed near the gas control.

If burner is not installed, check off type of gas converted to on card. Also, indicate conversion by adding "Conv" behind gas.

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# Empire Comfort Systems Inc. Belleville, IL

If you have a general question about our products, please e-mail us at info@empirecomfort.com.

If you have a service or repair question, please contact your dealer.

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